

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
10 March 2005 (10.03.2005)

PCT

(10) International Publication Number
WO 2005/021453 A1

(51) International Patent Classification⁷: **C03B 37/025**,
37/027, G02B 6/10, 6/16

e Sistemi Telecom S.p.A., Viale Sarca 222, 222, I-20126
Milano (IT).

(21) International Application Number:
PCT/EP2003/009732

(74) Agents: **BOTTERO, Claudio** et al.; Porta Checcacci &
Associati S.p.A., Via Trebbia, 20, I-20135 Milano (IT).

(22) International Filing Date: 29 August 2003 (29.08.2003)

(81) Designated States (*national*): AE, AG, AL, AM, AT, AU,
AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU,
CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,
LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW,
MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC,
SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA,
UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(25) Filing Language: English

(26) Publication Language: English

(71) Applicant (*for all designated States except US*): **PIRELLI
& C. S.p.A.** [IT/IT]; Via Gaetano Negri, 10, I-20123 Mi-
lano (IT).

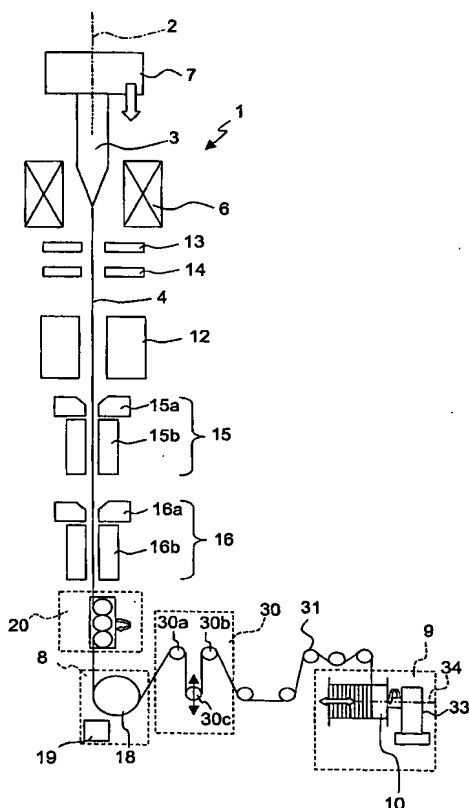
(84) Designated States (*regional*): ARIPO patent (GH, GM,
KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW),
Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),
European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE,
ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO,
SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM,
GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

(72) Inventors; and

(75) Inventors/Applicants (*for US only*): **SARCHI, Davide**
[IT/IT]; Pirelli Cavi e Sistemi Telecom S.p.A., Viale Sarca,
222, I-20126 Milano (IT). **FOGLIANI, Sabrina** [IT/IT];
Pirelli Cavi e Sistemi Telecom S.p.A., Viale Sarca, 222,
I-20126 Milano (IT). **PATA, Roberto** [IT/IT]; Pirelli Cavi

[Continued on next page]

(54) Title: PROCESS FOR PRODUCING A LOW POLARIZATION MODE DISPERSION OPTICAL FIBER



(57) Abstract: In a process for producing a low polarization mode disper-
sion optical fiber, which comprises the steps of drawing a glass preform into a
optical fiber and of spinning, during drawing, the optical fiber about an
optical fiber axis, the spinning is imparted according to a bidirectional and
substantially trapezoidal spin function, which includes zones (P) of substan-
tially constant amplitude (plateau) and zones of transition (T) where inversion
of the spin direction takes place, wherein the extension (p) of the zones of
substantially constant amplitude is greater than the extension (t) of the zones
of transition, and the number of inversions of the direction of spin in a length
of fiber of 20 m is at most two.



Published:

— *with international search report*

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.